WHAT IS CLAIMED IS:

1. A temperature regulator that adjusts a temperature of an X-ray detector, comprising:

a controller;

a thermal sensor reporting temperature data to the controller; and

a thermo-electric device having a positive voltage contact and a negative voltage contact that responds to the controller being in receipt of the temperature data from the thermal sensor.

2. The apparatus of claim 1, further comprising:

a switch that switches the positive voltage contact and the negative voltage contact.

- 3. The apparatus of claim 1, wherein the thermal sensor is a thermocouple
- 4. The apparatus of claim 1, wherein the thermal sensor is in contact with an X-ray panel.
 - 5. The apparatus of claim 1, further comprising:

a voltage source connected to the positive voltage contact and the negative voltage contract.

- 6. The apparatus of claim 1, wherein the thermo-electric device is a solid state thermo-electric device.
 - 7. The apparatus of claim 1, further comprising:

a switch that controls current direction at the positive voltage contact controlled by the controller in response to receipt of temperature data.

comprises the step of;

- 8. The apparatus of claim 1, where the thermo-electric device responds to the control to maintain an X-ray panel in the X-ray detector within a predetermined temperature range.
- 9. The apparatus of claim 8, wherein the predetermined temperature range is twenty-five to thirty-five degrees Celsius.
- 10. A method for regulating device temperature, the method comprising the steps of:

measuring a device temperature;

determining if the device temperature is within a predetermined operational range; and

adjusting a current that enters a thermo-electric device in order to change the device temperature.

11. The method of claim 10, further comprising the steps of:
identifying a mode of temperature control the device requires; and
changing polarity of a voltage entering the thermo-electric device in response

to the mode of temperature control.

12. The method of claim 11, wherein the step of changing further

switching the voltage with an electromagnetic switch that responds to the controller.

- 13. The method of claim 10, where measuring further comprise: sending data from a thermocouple to the controller.
- 14. The method of claim 10, wherein the thermo-electric device is a solid-state thermo-electric device.

- 15. The method of claim 10, wherein the predetermined operating range is twenty-five to thirty-five degrees Celsius.
- 16. A system that adjusts a temperature in a X-ray detector, the system comprising:

a controller;

a thermal sensor reporting temperature data to the controller;

a thermo-electric device having a positive voltage contact and a negative voltage contact that responds to the controller being in receipt of the temperature data from the thermal sensor; and

an external cooling device that removes thermal energy from the thermoelectric device

17. The apparatus of claim 16, further comprising:

a switch that switches the positive voltage contact and the negative voltage contact.

- 18. The apparatus of claim 16, wherein the thermal sensor is a thermocouple.
- 19. The apparatus of claim 16, wherein the thermal sensor is a solid-state thermal sensor.
- 20. The apparatus of claim 16, wherein the thermal sensor is in contact with an X-ray panel.
 - 21. The apparatus of claim 16, further comprising:

a voltage source connected to the positive voltage contact and the negative voltage contract.

22. The apparatus of claim 16, wherein the thermo-electric device is a solid-state thermo-electric device.

- 23. The apparatus of claim 16, wherein the external cooling device is a liquid cooling device.
- 24. The apparatus of claim 16, where the external cooling device is located more tan three meters from the thermo-electrical device.